

Irrigated Lands Regulatory Program TOTAL NITROGEN APPLIED (TNA) REPORT INSTRUCTIONS

November 1, 2019

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TNA REPORT DOCUMENT SUMMARY

All growers with ranches classified as Tier 2 and Tier 3 where any high risk crop is grown are required to have records of the total nitrogen applied (TNA) annually to ALL crops grown on their ranch from January 1st to December 31st, and to report this information annually by March 1st or within 60 days of ranch termination. Growers submit their TNA reports by completing the TNA report, now available in GeoTracker.

The purpose of this document is to provide guidance and instruction to growers on what information is necessary to submit the TNA report and on how to report TNA in GeoTracker.

HOW TO REPORT TNA IN GEOTRACKER

To report TNA, you must log in to your GeoTracker ESI account. To log in to GeoTracker, open your web browser and navigate to http://geotracker.waterboards.ca.gov/esi

Enter your username and password and click on, Login to GeoTracker ESI.



You can view and edit your ranch(es) information and now submit TNA for each ranch, by clicking on [SUBMIT TNA REPORT], located to the far right of each ranch name.



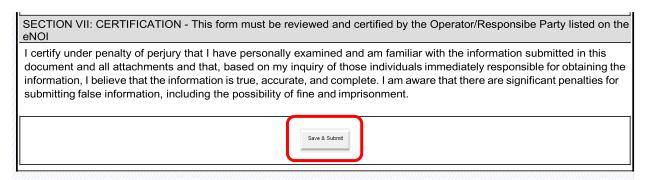
HOW TO SUBMIT THE TNA REPORT

Select the reporting year for which you are submitting the TNA by opening and selecting the year from the drop-down menu located on the upper right corner of the page.



Complete all the sections of the TNA report from top to bottom.

Once the TNA report is complete, click on the SAVE/SUBMIT button located at the bottom of the page.



If the report is complete and the information is correct, you will be redirected to the previous screen. This confirms that the TNA report has been submitted for this ranch.

HOW TO CORRECT SUBMITTAL ERRORS

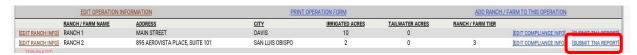
If there are errors on the report or incomplete data, a list will appear on the top of the page highlighted in yellow. A screenshot of all the potential errors is included below:

- PHYSICAL RANCH ACRES REPORTING IS A REQUIRED FIELD.
- WATER SOURCES IS A REQUIRED FIELD.
- TOTAL VOLUME OF RECYCLED / RECLAIMED WATER IS A REQUIRED FIELD.
- TOTAL NITROGEN IS A REQUIRED FIELD.
- TOTAL VOLUME OF WELL / CITY WATER IS A REQUIRED FIELD.
- · AVERAGE NITRATE CONCENTRATION IN WELL / CITY WATER IS A REQUIRED FIELD.
- CROP TYPE IS A REQUIRED FIELD.
- TOTAL CROP ACRES IS A REQUIRED FIELD.
- · NITROGEN PRESENT IN SOIL IS A REQUIRED FIELD.
- NITROGEN APPLIED IN FERTILIZERS AND OTHER MATERIALS IS A REQUIRED FIELD.
- · CERTIFIED ORGANIC / CONVENTIONALLY GROWN IS A REQUIRED FIELD.
- BASIS IS A REQUIRED FIELD.

To submit TNA, you must correct all the errors and click on the SAVE/SUBMIT button at the bottom of the page. You will be redirected to the previous screen and this confirms that the TNA report has been submitted.

HOW TO VIEW A SAVED TNA REPORT

To view a saved and previously submitted TNA report, click on the [SUBMIT TNA REPORT] located to the far right of each ranch name.

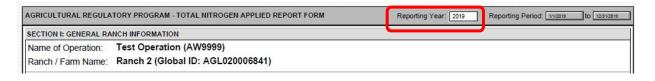


Once you are on the reporting page, click on the dropdown menu for Reporting Year at the top of the report in the grey box and select the reporting year.



HOW TO REVISE A PREVIOUSLY SAVED AND SUBMITTED REPORT

Once you are on the reporting page, click on the dropdown menu for Reporting Year at the top of the report in the grey box and select the reporting year. Make revisions and click on SAVE/SUBMIT at the bottom of the report.



INFORMATION NEEDED FOR THE TNA REPORTING REQUIREMENT

TNA REPORTING PERIOD: January 1st to December 31st of each year.

TNA REPORTING DEADLINE: TNA Reports must be received by March 1st of each year, or within 60-days after terminating a ranch.

RECORDS REQUIRED TO REPORT TNA:

- A. Total nitrogen applied in pounds per crop-acre (lbs./crop-acre) in fertilizers and amendments and all other materials/products containing nitrogen in any report or concentration, including but not limited to, organic and inorganic fertilizers, foliar, slow release products, compost, compost teas, manure, and extracts;
- B. Average nitrogen concentration in irrigation water applied during the annual reporting period and the calculated or estimated nitrogen load in lbs./ranch-acre from irrigation water; and
- C. Total nitrogen present in the soil (lbs./crop-acre) available for crop uptake. The total nitrogen present in the soil must be measured at least once per annual reporting period for each ranch.

HOW TO REPORT CROP INFORMATION:

- A. For short-term crops grown less than 12 months and harvested during the reporting period (January 1st to December 31st): report the TNA to the entire crop throughout its growing cycle by the March 1st dateline.
- B. For intermediate-term crops, grown more than 12 months but less than 24 months (such as strawberries and bell peppers) that are harvested during the reporting period or harvested by the time the TNA report will be submitted (harvested between December 31st and March 1st): select the specific crop from the dropdown menu and report the TNA to the entire crop throughout its growing cycle by the March 1st dateline.
- C. For intermediate-term crops, grown more than 12 but less than 24 months (such as strawberries and bell peppers) that are NOT harvested during the reporting period and that will NOT be harvested by the time the TNA report will be submitted (March 1st): select "Crop, Not Final Harvest" from the specific crop dropdown menu. This indicates that the crop is still in the ground and will be finally harvested after the current March 1st reporting dateline. In this first submittal report, include the amount of nitrogen applied to the crop from the beginning of its growing cycle until December 31st. Resubmit the completed report after the crop is finally harvested (kill-date), and provide the nitrogen applied to the crop from fertilizers and other materials throughout its entire growing cycle. If possible, update the calculation for the nitrogen applied through

- irrigation water to include the nitrogen applied from the total amount of irrigation water applied to the crop throughout its entire growing cycle.
- D. For long-term crops, grown more than 24 months (such as blueberries) report the TNA during the reporting period of January 1st to December 31st on an annual basis by March 1st.
- E. For crops that are considered <u>baby crops</u> (such as baby lettuce) select the "crop, baby" option in the specific crop dropdown menu.

SECTIONS OF THE TNA REPORT

SECTION I: GENERAL RANCH INFORMATION

Name of Operation, AW#, Ranch/Farm Name, and Global ID

This information is auto filled from the ranch information page, as it is reported in the eNOI.

NOTE: Make sure that all the information reported in the eNOI is current and accurate.

Physical Ranch Acres Reporting

Report the total acreage for which you are reporting TNA. If part of the acreage was under cover crops, the reporting acreage must include the acres with cover crops, even if no nitrogen applications were made to the cover crops

The reporting acreage includes all farmed acres plus any fallowed acres that were not under crop production during the entire 12 months. Report the fallowed acres as part of the Physical Ranch Acres Reporting box AND separately in the corresponding Fallow Acres box.

Fallow Acres

Report any fallowed acres that were not under crop production during the entire 12 months.

Sum of Total Crop Acres

This value will automatically calculate the sum of the crop acres reported in the Nitrogen Applied Section IV. This box is intended to be a quick review to help make sure all the required acres were reported.

The sum of the crop acres plus the fallow acres should equal or exceed the physical ranch acres reporting. If any acres of the ranch were fallow throughout the entire reporting period, enter them as Fallow Acres. If there are special circumstances where the sum of the total crop acres plus fallow acres are less than the physical ranch acres reporting, provide an explanation in Section VI.

APN(S) Assessor Parcel Numbers

The APN numbers are automatically generated and updated in the TNA report from the eNOI ranch information page. Select/mark all the assessor parcel numbers (APNs) that correspond to acreage reported in the TNA report.

Drop-down menu selections if the ranch is a greenhouse, nursery, or hydroponic

Select one of the options that best describes how the irrigation water is managed, collected, and drained out of the ranch.

EXAMPLE: IF THE GREENHOUSE OPERATION HAS A REVERSE OSMOSIS (RO) SYSTEM INSTALLED WHICH RECYCLES THE WATER UP TO 5 TIMES, AND THE SALTS (BRINE) OF THE RO SYSTEM IS CLEANED AND REMOVED AS DRY MATERIAL, THEN THE PROPER SELECTION IS "ALL EXCESS WATER IS CAPTURED AND RECYCLED; THE ONLY WASTE IS DRY MATERIAL, WHICH IS PROPERLY DISPOSED OF".

Errors in Section I

Physical ranch acres reporting is a required field. Make sure you report the number of acres that correspond to the TNA report.

The background of the "Sum of Total Crop Acres" cell will be pink if the sum of the crop acres reported in section IV and the fallow acres, is less than the Physical ranch Acres Reporting. If you receive this error, double-check to ensure that you are reporting all the crop acres grown and harvested during the reporting period and any/all acres that were fallow throughout the entire reporting period.

SECTION II: NITROGEN APPLIED WITH IRRIGATION WATER

Include all sources and applications (leaching, runoff, backflush, operational spills, etc.).

Section II-A: Water Source(s)

Report all sources of irrigation water applied to the ranch during the reporting period. If the ranch only received well water, select the first option that reads: "Only Well / City Water". If the ranch received water from a well or city and from a recycled or reclaimed water project, make sure to select the recycled water option that includes the words "and another source" at the end to include the well/city water.

Report if the ranch has received irrigation water from any of the nine (9) recycled or reclaimed water projects and/or the four (4) general categories listed below. The contact information for each project and a short guidance on how growers can obtain the value of the total nitrogen concentration (mg/L) of the recycled/reclaimed water, to be reported in Section II-B. Projects is also included:

- A. Blue Valve (San Benito County Water District Delivered Water), Phone: (831) 637-8218, Email: jcattaneo@sbcwd.com
- B. CSIP (Monterey County Water Resources Agency, Castroville Seawater Intrusion Project/ Salinas Valley Reclamation), Phone: (831) 372-3367, Email: bobh@my1water.org, Link: http://montereyonewater.org/facilities water quality.html
- C. Hollister Domestic Recycled Water Plant (Hollister Tertiary Treated Recycled Water). The San Benito County Water District delivers this water. Phone: (831) 637-8218, Email: jcattaneo@sbcwd.com
- D. Laguna County Sanitation District (Santa Maria). Phone: (805) 934-6282, Email: jchaja@cosbpw.net, and (805) 739-8750, Email: mwilder@cosbwp.net
- E. Los Osos Water Recycling Facility (Los Osos), Phone: (805) 781-1521, Email: Mtallone@co.slo.ca.us
- F. PVWMA (Pajaro Valley Water Management Agency, Watsonville Area Water Recycling), Phone: (831) 722-9292, Email: lnfo@PVWater.org, Link: https://www.pvwater.org/contact/
- G. Santa Cruz Davenport Reclamation Facility, Phone: (831) 454-2160, Email: Ashleigh.trujillo@santacruzcounty.us
- H. SCRWA (Santa Clara Valley Water District and South County Regional Wastewater Authority, Gilroy and Morgan Hill Recycled Water), Phone: (408) 848-0480
- I. Trilogy Master Plan Community Reclaimed Water in Nipomo (Woodlands Water Recycling Facility), Phone: (805) 544-4011, Email: <u>RobM@wallace.us</u>

General Categories

J. Domestic Reclaimed Water with Secondary Treatment. Contact the Community Service, Sanitation District, or the City to obtain the Total Nitrogen Concentration

in the reclaimed water. If the Total Nitrogen Concentration is not available, you must take a sample and analyze it for the Total Nitrogen concentration.

- K. Fruit and Vegetable Processing Facility (Recycled Water),
- L. Olive Processing Facility (Recycled Water),
- M. Winery Processing Facility (Recycled Water).

Contact the Processing Facility directly to obtain the total nitrogen concentration in the recycled water. If the total nitrogen concentration is not available, you must sample the recycled/reclaimed water used to irrigate crops and report the total nitrogen concentration.

Section II-B: Recycled / Reclaimed Water

Estimated Total <u>Volume of Recycled / Reclaimed Water</u> Applied to Entire Reporting Acres During Reporting Period (gallons)

Enter the total gallons of recycled or reclaimed water applied to the ranch during the January 1st to December 31st reporting period. This field is used to auto-calculate the cell in Section II-D: "Nitrogen Applied with Irrigation Water."

NOTE 1: Growers should contact the corresponding agency or facility to verify the volume of recycled or reclaimed water applied.

NOTE 2: The Total Volume of recycled or reclaimed Irrigation Water Applied should include any volume applied for leaching, runoff, backflush, operational spills, etc.

NOTE 3: Rainwater should not be included.

Average Total Nitrogen Concentration of <u>Recycled / Reclaimed Water</u> (from agency data)

Growers should contact their delivering agency or facility to obtain the total nitrogen concentration and volume of recycled or reclaimed water applied during the reporting period.

The Total Nitrogen concentration and the volume reported in Section II-B are used to calculate the Nitrogen Applied with Irrigation Water in Section II-D.

NOTE: The Total Nitrogen concentration will be used to calculate the Nitrogen Applied with recycled or reclaimed irrigation water.

Section II-C: Well / City Water

Average Nitrate Concentration in Well / City Water (mg/L)

Report the average nitrate concentration of the well/city irrigation water applied. This number should include the amount of nitrate naturally dissolved in the irrigation water as

it is pumped out of the ground or delivered by the city. This number should not include liquid fertilizers applied during fertigation.

To report the average nitrate concentration you must, at a minimum, obtain a laboratory analysis or utilize a portable measuring device that provides a discrete numeric result for the nitrate concentration of the primary source of irrigation water applied to the ranch, during the reporting period.

Select the proper units of Nitrate concentration you are using to report the irrigation water nitrate concentration: Nitrate as Nitrate (commonly shown as NO3 in laboratory reports) or Nitrate as Nitrogen (commonly shown as N, NO3-N, or NO3NO2N in laboratory reports).

In the case that more than one well is used to irrigate, and individual nitrate concentrations are known, operators must estimate the volume applied from each source of irrigation water to obtain the weighted average nitrate concentration. To help calculate the weighted concentration averages if multiple wells are in use, click on the blue link titled weighted-avg-water in the TNA report to access a simple excel file developed to calculate the weighted average.

The excel file can also be found on the Irrigated Lands Regulatory Program website at Central Coast Water Board Website Irrigated Lands Regulatory Program.

NOTE 1: A discrete measurement is required for the primary source of irrigation water applied. However, any methodology, such as nitrate quick test, can be used to measure the concentration of all other sources of irrigation water applied, e.g. backup wells.

NOTE 2: mg/L = ppm

Estimated Total <u>Volume of Well / City Water</u> Applied to Entire Reporting Acres During Reporting Period (gallons)

Enter the total gallons of water from wells or delivered by the city applied to the entire reporting acreage during the reporting period of January 1st to December 31st. This field is used to auto-calculate the Nitrogen Applied with Irrigation Water in Section II-D.

To convert the total volume applied as acre-feet or acre-inches to gallons, click on the blue link in the TNA report titled <u>convert to gallons</u> to access a simple excel file developed to convert acre-feet or acre-inches to total gallons applied.

The excel file can also be found on Irrigated Lands Regulatory Program website at Central Coast Water Board Website Irrigated Lands Regulatory Program.

NOTE 1: The Estimated Total Volume of Irrigation Water Applied should include any water applied for leaching, runoff, backflush, operational spills, etc.

NOTE 2: Rainwater should not be included.

Section II-D: Nitrogen Applied with Irrigation Water

Nitrogen Applied with <u>Irrigation Water</u> (water from all sources) (lbs./ranch-acre) This value corresponds to the pounds of nitrogen applied to each ranch-acre (physical ranch-acres minus fallow acres) that received irrigation water during the reporting period (that is, acres that were not fallow throughout the entire reporting period).

The value in this cell will be automatically calculated after the following information has been entered in their corresponding cells:

- A. If only water from a Well / City Water was used, provide a value for the Physical Ranch-Acres Reporting and Fallow Acres (Section I); and values for the irrigation water nitrate concentration, units of concentration (nitrate as NO3 or nitrate as NO3-N), and the total gallons of well / city water applied (Section II-C). Section II-D will auto-calculate.
- B. If only recycled or reclaimed water was used: provide a value for the Physical Ranch-Acres Reporting and Fallow Acres (Section I); the total nitrogen concentration and a value for the total gallons of recycled or reclaimed water applied (Section II-B). Section II-D will auto-calculate.
- C. If recycled or reclaimed water was used and water from another source (such as a well) was also used: provide a value for the Physical Ranch-Acres Reporting and Fallow Acres (Section I); the total nitrogen concentration, and a value for the total gallons of recycled or reclaimed water applied (Section II-B); provide values for the irrigation water nitrate concentration of the well/city water, the units of concentration (nitrate as NO3 or nitrate as NO3-N), and the total gallons of well/city irrigation water applied (Section II-C). Section II-D will auto-calculate and will sum the nitrogen applied with recycled or reclaimed water and the nitrogen applied with the water from the well / city.

Section II-E: Volume Check

This cell will automatically calculate the estimated average acre-feet of water applied to each crop-acre. This cell is intended to be a quick review to help make sure the reported volumes correspond to the acre-feet of water applied to each crop acre.

Errors in Section II

Water Source(s) is a required field. Make sure you select all sources of irrigation water.

The Estimated Total Volume of water applied from each source is a required field. Make sure you reported the estimated volume of each source of irrigation water applied.

The Average Concentration of Nitrate or Nitrogen from each source of water applied is a required field. Make sure you reported the nitrate or nitrogen concentration of each source of irrigation water applied.

The background of the Volume check cell will be pink if the estimated acre-feet of water applied to each crop-acre is not typical for crops grown in this region. If the cell indicates that the water applied to each crop acre is not typical, or if the value does not correspond with your estimated volume of water applied to your crops, review all information reported in Sections I, II, and IV of the TNA report to make sure that the volume reported is correct.

SECTION III: NITROGEN APPLIED WITH COMPOST & AMENDMENTS

Physical Acres Receiving Compost & Amendments

Report the total number of ranch acres (physical acres) where nitrogen applications from compost and amendments were made.

Nitrogen Applied in Compost & Amendments (Total pounds)

Report the total number of pounds of nitrogen applied from compost, amendments, and all other nitrogen containing materials (such as compost teas, humic acids, bacterial extracts, soil enhancers, but NOT including fertilizers, which must be reported in Total Nitrogen Applied Section IV) if the applications were:

- A. Applied to improve the soil physical and/or chemical properties (increase organic matter, improve structure or moisture retention), and usually applied when there are no crops growing on the ground, or
- B. Intended for multiple crops, so the nitrogen would be distributed to many crops and the nitrogen is not already reported in Section IV.
- Example 1: If you apply 20 pounds of N to 10 physical ranch-acres, then 30 pounds of N to a different 5 physical ranch-acres of the ranch, and finally 30 more pounds of N to another 10 physical ranch-acres; report 80 pounds of N to a total of 25 ranch-acres.
- Example 2: If you apply 20 pounds of N to 10 physical ranch-acres, then 30 pounds of N to those same 10 physical ranch-acres, and finally 30 more pounds to the same 10 physical ranch-acres; report 80 pounds of N to 10 ranch-acres.
- NOTE 1: Also report in this section all other applications of nitrogen that are not reported in Section IV.
- NOTE 2: In the case where multiple applications are made during the year, sum the applications and report the total applied nitrogen in pounds.
- NOTE 3: Make sure the value reported from the compost and amendment applications is converted from pounds or tons of the gross material to pounds of nitrogen.

SECTION IV: NITROGEN APPLIED WITH FERTILIZERS & OTHER MATERIALS AND NITROGEN PRESENT IN THE SOIL

<u>Specific Crop(s)</u> Grown and Harvested During Reporting Period (Select from drop-down list)

Report information for each specific crop grown on the ranch during the reporting period. Select specific crop(s) from the drop-down menu. A list of crops is included at the end of theses instructions.

Information for a specific crop can also be reported separately (more than one line) if the amounts of water or fertilizer inputs differ, specifically in those cases where the specific crop is grown during different seasons. For example, water and fertilizer inputs might be different for lettuce crops grown and harvested in the winter versus the summer. In this case, you can report information for lettuce crops on two reporting lines.

Strawberry growers now have the option to select from a list of multiple strawberry options for varieties with different lengths of time in the ground, or special programs. Spinach, kale, and spring mix growers can also report crops with multiple cuttings. Bell pepper growers can indicate single-harvest or multiple-harvest. And lastly, broccoli, cauliflower, and lettuce growers can report different crop seasons, such as winter or summer options.

Different specific crops can be aggregated and reported on one line only if: these crops were intermingled with individual plants of different specific crops growing next to each other in the same row, on the same field, at the same time, and receiving the same amount of water and fertilizer. For examples, refer to the pictures below.

NOTE 1: Cover crops should be selected in the Specific Crops Grown dropdown menu, and the cover crop acreage should be provided.

NOTE 2: See picture examples below to determine under what circumstances a specific crop can be reported as mixed greens or spring mix.

Picture of multiple crops planted together in one row



This example can be reported as "spring mix" or "mixed greens" if it represents a mix of different specific crops growing together such as radicchio, escarole, and arugula; are intermingled, grown on the same row and field; and at the same time and receiving the same amount of water and fertilizer.

Picture of multiple varieties of lettuce



This is an example of different varieties of lettuce that are grown together, next to each other at the same time in the same row. This should be reported on a single line as "lettuce, leaf".

Picture of different crops planted in different rows



This is an example of alternating rows of different crops. If the crops are different varieties of the same specific crop, such as red-leaf lettuce, green-leaf lettuce, butter-head lettuce, etc., these can be aggregated together and reported as "lettuce, leaf" on one reporting line on the report. If the crops are different crops in the alternating rows, such as radicchio, arugula, escarole, lettuce, etc., each of these must be reported on a separate line on the report.

Total Crop Acres

Report the crop-acres in each row for each specific crop reported. If a specific crop is grown and harvested more than one time during the annual reporting period, and the specific crop is being reported in only one line on the report, then the total crop acres of that crop equals the sum of the acres planted of that crop each time (each rotation).

EXAMPLE: IF ON THE SAME RANCH, A GROWER HAS A CROP OF HEAD LETTUCE IN THE SPRING ON 10 ACRES, A SECOND CROP WITH 10 ACRES OF BROCCOLI, AND THEN A THIRD CROP WITH HEAD LETTUCE ON 10 ACRES, THEY WOULD REPORT 20 ACRES HEAD LETTUCE AND 10 ACRES BROCCOLI. THEREFORE, EACH INDIVIDUAL TOTAL CROP ACRES BOX ON THE REPORT CAN BE THE SAME, MORE, OR LESS THAN THE TOTAL ACREAGE OF THE ENTIRE RANCH.

NOTE: If the grower chooses to report their crops seasonally (such as reporting Lettuce (Spring/Summer) and Lettuce (Fall/Winter) on separate lines, then the crop-acre reported for each crop should correspond to the acres grown and harvested for that crop only. In the example above, the grower would report 10 acres of Lettuce, Head

(Fall/Winter) and on another line would report 10 acres of Lettuce, Head (Spring/Summer).

Nitrogen Present in Soil (lbs./crop-acre)

Report the nitrogen present in the soil. This information must be reported as the total pounds of soil nitrogen present on each acre of the specific crop. The content of nitrogen in the soil must be measured at least once per annual reporting period for the ranch. The goal is to measure the content of nitrogen present that is available in the soil for the subsequent crop uptake.

- A. To meet the requirement to record total nitrogen in the soil, either take a soil sample for laboratory analysis, use the nitrate quick test, or use an alternative method to evaluate nitrogen content in soil, prior to planting, prior to seeding the field, prior to pre-side dressing, or when appropriate to determine nitrogen available in the soil for the following crop.
- B. Report the content of available nitrogen present in the soil in lbs./acre. For the purpose of measuring nitrogen content in the soil, in those cases where many small blocks exist in the ranch, there is an option to group the blocks into a large management unit to comply with the soil measurement requirement.
- C. The method chosen to measure nitrogen content, the forms of nitrogen to measure (nitrate, urea, ammonia, all) and the effective rooting depth, should be decided when samples are taken. Unit conversions also apply, nitrogen in ppm (parts per million) in the effective root-zone must be converted to pounds of nitrogen per acre.
- D. Reporting of available soil N content depends on the approach used to collect the samples. If multiple soil samples are collected from different parts of the ranch, then are mixed into a composite sample to measure available N in the soil of the whole ranch, resulting in only one result from the lab, report this amount on the line corresponding to each crop where fertilizer applications will be modified based on N present in soil. If samples are gathered to determine nitrogen availability by specific crop(s), field(s), or soil type(s), report the average soil nitrogen content from the samples under the subsequent crop(s).
- E. The proper timing to measure the nitrogen content in the soil depends on the crop growing cycles and fertilizer management. Measure nitrogen content in the soil at the time of the year when soil nitrogen content is high and must be accounted for as a source of nitrogen for the following crop and prior to or at the time when the crop fertilizer application decisions are made. It would be incorrect to measure nitrogen in the soil after the rainy season, when values are low, or at a time when no fertilizer application decisions are made. In the Salinas Valley, with multiple crop rotations, the appropriate time is between the first and second crops or in the spring. For strawberry crops the appropriate measurement may

- be prior to slow release fertilizer applications. Consult with your local crop advisor to determine the appropriate time to measure soil nitrogen content in a situation.
- F. Some crops may not have a soil nitrogen content to be reported because the nitrogen present in the soil was not measured prior to that crop. In these cases, the soil nitrogen content cell for that crop on the report should be left blank.

NOTE 1: Growers must maintain information of the amount(s) of nitrogen content in the soil, the date(s) of measurement, along with a justification for the timing of the measurements in the Farm Plan.

NOTE 2: This value corresponds to the pounds of nitrogen present on each acre of the crop (crop-acre).

Nitrogen Applied in Fertilizers and Other Materials (lbs/crop-acre)

Report the total nitrogen applied in fertilizers, amendments (if not reported in Section III above), and all other materials/products containing nitrogen, to each specific crop harvested during the reporting period. This section includes organic fertilizer and composts, manures and any other N-containing organic materials that provide nitrogen to the specific crop if they were not reported in Section III. This information must be reported as the total pounds of nitrogen applied to a crop-acre of a specific crop grown on the ranch that was finally harvested (kill-date) during the reporting period (this applies to short term crops). This value corresponds to the pounds of nitrogen applied to each crop-acre. Review the instructions in this document under, HOW TO REPORT CROP INFORMATION.

In the case of multiple crop rotations of the same specific crop, the total nitrogen applied in pounds/crop-acre is the average applied on all the rotations and on all the acres. Refer to the example below for guidance on how to correctly calculate the average application.

NOTE: You can click on the blue link titled <u>N from fertilizers</u> in the Section IV header of the TNA report to access a simple excel file developed to calculate the value to report in the case of multiple plantings and harvests of a specific crop on different acres. The file can also be found at the Central Coast water Board Irrigated Website Irrigated Lands Regulatory Program.

EXAMPLE: IF A GROWER HAS A CROP OF HEAD LETTUCE IN THE SPRING ON 10 ACRES AND APPLIES NITROGEN AT 200 POUNDS/CROP-ACRE, A SECOND CROP OF LETTUCE ON 50 ACRES AND APPLIES NITROGEN AT 400 POUNDS/CROP-ACRE, AND THEN A THIRD CROP OF LETTUCE ON 100 ACRES AND APPLIES NITROGEN AT 300 POUNDS/CROP-ACRE, THEY WOULD THEN CALCULATE THE TOTAL APPLIED ON ALL ACRES AS FOLLOWS: 200 POUNDS/CROP-ACRE X 10 CROP-ACRES + 400 POUNDS/CROP-ACRE X 50 CROP-ACRES + 300 POUNDS/CROP-ACRE X 100 CROP-ACRES = 2,000 + 20,000 + 30,000 POUNDS. THEN DIVIDE THIS TOTAL BY ALL THE CROP-ACRES (160 CROP-ACRES). THIS IS 52,000 POUNDS DIVIDED BY 160 CROP-

ACRES. THE FINAL NUMBER TO REPORT IS 325 POUNDS/CROP-ACRE IN THE NITROGEN APPLIED IN FERTILIZERS AND OTHER MATERIALS BOX IN SECTION IV OF THE REPORT.

For long-term crops, report the total amount of nitrogen applied during the 12 months reporting period.

To calculate the amount of N applied with fertilizers, convert the fertilizer N-P-K % to pounds of nitrogen by multiplying the percent nitrogen content in the fertilizer product by the total amount of fertilizer applied per acre. Report the nitrogen applied with fertilizers containing nitrogen including urea, ammonia, ammonium, nitrate, and all other nitrogen containing materials/products. Liquid fertilizers and other materials applied through the irrigation as fertigation should be accounted for in this section.

O/C

Specify if the crop was certified organic (O) or conventionally (C) grown.

Additional information

Report any additional information corresponding to the specific crop reported in Section IV.

Nursery, greenhouses and hydroponic operations will need to select the option that best describes how the crops were grown. Additional options for propagation crops (grown for transplant) and crops grown under hoop houses are also available.

Select "R" if the crop is grown as part of a research trial or study and "not to maximize yields" and "not for human consumption."

Select "NY (no yield)" or "LY (low yield)" if applications of nitrogen were made to a crop, but all or a portion of the crop was lost, such as if the crop was "disked in" due to pests, disease, etc.

NOTE: All crops must be reported/included if they have been harvested, killed, disked in, left on field, or, in other words, terminated, during the reporting period.

Errors in Section IV

Crop reporting must start at Crop Row # 1. All crop reporting must include acreage, nitrogen in soil for at least one crop, nitrogen in fertilizers and farming method.

Specific crop is a required field. At least one crop must be reported, unless all the acres were fallowed during the entire reporting period.

Nitrogen present in soil is a required field. Report the nitrogen content in the soil for at least one crop, it does not need to be reported in Crop Row # 1.

Nitrogen applied in fertilizers and other materials is a required field for all crops reported.

Certified organic or conventionally grown is a required field for all crops reported.

Basis for N applied is a required field for all crops reported. You must select at least one of the options.

SECTION V: BASIS FOR THE AMOUNT OF TOTAL NITROGEN THAT WAS APPLIED

Select all the boxes that apply to identify the basis for total nitrogen applied. Report the source of the information you used to guide you in your fertilizer application decisions. This type of information refers to the known values of the amount of nitrogen taken up and/ or needed by the crop(s) to grow and produce a desired yield.

NOTE: Cells in this section will remain yellow (incomplete), unless one is checked.

SECTION VI: EXPLANATIONS AND COMMENTS

Provide a brief explanation in this box if the information on this report does not represent the entire 12-month reporting period, if the reporting acreage is different than the ranch acreage (e.g., due to fallowed acres), if any other section in the report is incomplete, or if additional comments and explanations are needed to assist with the processing of the from.

SECTION VII: CERTIFICATION

This report must be reviewed and certified by the Operator/Responsible Party listed in the eNOI.

Water Code Section 13267

Review the declaration stating that, to the best of your knowledge and belief, under penalty of perjury, the information provided is true, accurate, and complete.

Click on Save & Submit

By Clicking on this button, you declare that you have read, understand, and accept the terms described in the Water Code Section 13267; the TNA information is saved, and submitted to the Water Board.

QUESTIONS ABOUT THE TNA REPORT

Please contact Irrigated Lands Regulatory Program Staff:

By Mail: Irrigated Lands Regulatory Program

Central Coast Water Board 895 Aerovista Place, Suite 101 San Luis Obispo, California 93401

By Email: <u>AgNOI@waterboards.ca.gov</u>

By Phone: (805) 549-3148

CALCULATIONS AND CONVERSIONS

Estimate volume of water applied per ranch-acre

Section II of the report provides an auto-calculation to calculate the total nitrogen applied with irrigation water. In order to use the auto-calculation, you will need to first complete all of Section I, then begin to complete Section-II working from left-to-right.

If you want to calculate the total nitrogen applied with irrigation water yourself and for your records, use the following instructions.

You need to convert your estimated volume of water used from gallons to acre-feet, by doing the following:

- A. First, estimate the total gallons applied to the entire acres that were irrigated during the reporting period (acres that were not fallow throughout the entire reporting period); then,
- B. Calculate the acre-feet applied per ranch acre.

EXAMPLE:

RANCH = 10 ACRES
GALLONS APPLIED = 5,000,000

FIRST, CONVERT GALLONS TO ACRE-FEET USING THE FORMULA: GALLONS APPLIED ÷ 325,851

 $5,000,000 \div 352,851 = 14.17$ ACRE-FEET OF WATER APPLIED TO ENTIRE RANCH

SECOND, DIVIDE TOTAL ACRE-FEET BY THE RANCH REPORTING ACRES (SECTION I OF TNA REPORT)

14.17 ACRE-FEET ÷ 10 RANCH-ACRES = 1.41 ACRE-FEET PER RANCH-ACRE

NOTE: If volume is known as acre-feet per crop-acre, click on the blue link in the TNA report titled <u>convert to gallons</u> to access a simple excel file developed to convert acrefeet or acre-inches to total gallons applied. This tool will allow you to convert from acrefeet of water applied per crop-acre grown to total gallons of water applied to all crops grown. The excel file can also be found on Irrigated Lands Regulatory Program website at Central Coast Water Board Website Irrigated Lands Regulatory Program.

Calculate the Pounds of Nitrogen applied with the irrigation water

To determine pounds of nitrogen applied with the irrigation water (required in Section II of the TNA report) you will need the nitrate concentration of your irrigation water and the total volume of water used (in acre-feet from above calculation).

The basic formula is:

= Nitrate concentration in water x Total volume water applied x conversion factor

The conversion factor to use depends on the units the lab used to report nitrate concentration. They typically use either Nitrate-Nitrogen (NO3-N) or Nitrate-Nitrate (NO3-NO3)

For nitrate-nitrogen (NO3-N) use the following formula:

Lbs. N applied per ranch-acre = $\underline{NO3-N}$ concentration x $\underline{ac-ft}$. water used per ranch-acre x 2.72

For nitrate-nitrate (NO3-NO3) use this formula:

Lbs. N applied per ranch-acre = $\underline{NO3-NO3}$ concentration x $\underline{ac-ft.}$ water used per ranch-acre x $\underline{0.62}$

EXAMPLE:

TOTAL VOLUME OF WATER = 1.41 ACRE-FEET PER RANCH-ACRE AVERAGE NITRATE CONCENTRATION = 20 MG/L AS NO3 CONVERSION FACTOR = 0.62

1.41 ACRE-FEET/RANCH-ACRE X 20 MG/L X 0.62 = 17.5 LBS. N/RANCH-ACRE

<u>Conversion 1 - Fertilizer grade from Pounds of fertilizer applied to Pounds of Nitrogen applied</u>

Dry fertilizer and its active ingredients are expressed as a weight per area. For this type of fertilizer, the calculations are straightforward. For example, 100 pounds of a 10-20-30 fertilizer-grade material contains 10 pounds of active ingredients nitrogen (N), 20 pounds of phosphorus (P2O5), and 30 pounds potassium (K2O), equaling 60 pounds total of active ingredients, while the remaining 40 pounds consist of inactive materials.

EXAMPLE:

POUNDS OF FERTILIZER APPLIED PER ACRE = 50 LBS. FERTILIZER GRADE = 10-20-30 PERCENT NITROGEN CONTENT = 10/100 = 10% = 0.1

50 LBS. FERTILIZER X 0.1 NITROGEN = 5 LBS. OF N APPLIED

For liquid fertilizer, the density of the liquid fertilizer is a key detail because it is impossible to know the weight of a liquid fertilizer before the density is known. Typically, the net volume and net weight are available on the liquid fertilizer label. The liquid density can be calculated based on these values. For a few examples visit the website on How to Convert Liquid Fertilizer into Dry Fertilizer in Fertigation for Commercial Vegetable and Fruit Crop Production

<u>Conversion 2 - Interconverting Nitrate as Nitrate (Nitrate-NO3) and Nitrate as Nitrogen (Nitrate-N)</u>

To convert Nitrate-NO3 (mg/L) to Nitrate-N (mg/L): Nitrate-NO3 (mg/L) x 0.2259 = Nitrate-N (mg/L) For example, to convert 45 mg/L NO3-NO3 to NO3-N: 0.2259 x 45 mg/L NO3-NO3 = 10.2 mg/L NO3-N

And To convert Nitrate-N (mg/L) to Nitrate-NO3 (mg/L): Nitrate-NO3 (mg/L) = 4.4268 x Nitrate-N (mg/L)

For example, to convert 10 mg/L NO3-N to NO3-NO3: 4.4268 x 10 mg/L NO3-N = 44.3 mg/L NO3-NO3

NOTE: Some laboratories might have provided the nitrogen concentration in the irrigation water as Nitrate + Nitrite as Nitrogen (NO3NO2-N). In these cases, the conversions that apply to the concentrations expressed as NO3-N (Nitrate as Nitrogen) apply.

<u>Conversion 3 - Soil analysis conversion from Soil Nitrogen content in parts per million (ppm) to Pounds of Nitrogen present in soil per acre (lbs./acre)</u>

N (lbs./acre) =

Nitrate-N (NO3-N) concentration (ppm) x 2 x soil sample thickness (in.) ÷ 6 in.

NOTE: Assuming 2 million pounds of dry soil in upper 6 in/acre

EXAMPLE:

SOIL DEPTH NITRATE CONCENTRATION (EXPRESSED AS N) IS BETWEEN 0 - 6 INCH, IS 8 PPM BETWEEN 6 - 24 INCH, IS 4 PPM

THEN:

LBS. N IN 0 - 6-INCH SOIL DEPTH:

 $8 PPM \times 2 \times 6 IN \div 6 INCHES = 16 LBS. N/ACRE$

LBS. N IN 6 - 24-INCH SOIL DEPTH:

 $4 PPM \times 2 \times 18 IN \div 6 IN = 24 LBS. N/ACRE$

LBS. N TOTAL IN 0 - 24-INCH PROFILE:

16 LBS. + 24 LBS. = THE TOTAL IS 40 LBS. N/ACRE

GREENHOUSE/NURSERY/HYDROPONIC DROP-DOWN MENU SELECTIONS (SECTION I)

1a	No recycling occurs; all excess water is captured and conveyed to a surface
	water ditch or stream
1b	No recycling occurs; all excess water infiltrates into the ground
1c	No recycling occurs; all excess water is captured and conveyed to a lined
	evaporation pond
1d	No recycling occurs; some excess water is captured and conveyed to a surface
	water ditch or stream and some infiltrates into the ground
1e	No recycling occurs; all excess water is captured and conveyed to a storm drain,
	sewer, or city channel collection system
2a	All excess water is captured and recycled; brine/flush water is conveyed to a
	field or pond for percolation into the ground
2b	All excess water is captured and recycled; brine/flush water is conveyed to a
	lined evaporation pond
2c	All excess water is captured and recycled; brine/flush water is conveyed to a
	surface water ditch or stream
2d	All excess water is captured and recycled; some brine/flush water is conveyed
	to a surface water ditch or stream, and some is conveyed to a field or pond for
	percolation into the ground
2e	All excess water is captured and recycled; brine/flush water is conveyed to a
	storm drain, sewer, or city channel collection system
2f	All excess water is captured and recycled; the only waste is dry material, which
	is properly disposed of
2g	All excess water is captured and recycled; brine/flush water is conveyed to a
	pond and used to irrigate other crops on the ranch

WATER SOURCES(S) DROP-DOWN MENU SELECTIONS (SECTION II-A)

Only Well / City Water
Only Well / City Water
Blue Valve (San Benito County Water District Delivered Water)
Blue Valve (San Benito County Water District Delivered Water) and another
source
CSIP (Monterey County Water Resources Agency, Castroville Seawater Intrusion
Project/Salinas Valley Reclamation Project)
CSIP (Monterey County Water Resources Agency, Castroville Seawater Intrusion
Project/Salinas Valley Reclamation Project) and another source
Hollister Project (Hollister Tertiary Treated Recycled Water)
Hollister Project (Hollister Tertiary Treated Recycled Water) and another source
Laguna County Sanitation District Project (Santa Maria)
Laguna County Sanitation District Project (Santa Maria) and another source
Los Osos Water Recycling Facility Project (Los Osos)
Los Osos Water Recycling Facility Project (Los Osos) and another source
PVWMA (Pajaro Valley Water Management Agency, Watsonville Area Water
Recycling Project)
PVWMA (Pajaro Valley Water Management Agency, Watsonville Area Water
Recycling Project) and another source
Santa Cruz Davenport Reclamation Facility Project
Santa Cruz Davenport Reclamation Facility Project and another source
SCRWA (Santa Clara Valley Water District and South County Regional
Wastewater Authority, Gilroy and Morgan Hill Recycled Water Project)
SCRWA (Santa Clara Valley Water District and South County Regional
Wastewater Authority, Gilroy and Morgan Hill Recycled Water Project) and
another source
Trilogy Master Plan Community Reclaimed Water (Nipomo)
Trilogy Master Plan Community Reclaimed Water (Nipomo) and another source
Domestic Reclaimed Water with Secondary Treatment
Domestic Reclaimed Water with Secondary Treatment and another source
Fruit and Vegetable Processing Facility (Recycled Water)
Fruit and Vegetable Processing Facility (Recycled Water) and another source
Olive Processing Facility (Recycled Water)
Olive Processing Facility (Recycled Water) and another source
Winery Processing Facility (Recycled Water)
Winery Processing Facility (Recycled Water) and another source
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CROP ADDITIONAL INFORMATION DROP-DOWN MENU SELECTIONS (SECTION IV)

N/A	None Apply
GC	Greenhouse in container
GG	Greenhouse in ground
NC	Nursery in container
NG	Nursery in ground
НН	Hoop house
HY	Hydroponic
Р	Propagation crop
R	Research, not for human consumption
LY	Low yield
NY	No yield

SPECIFIC CROPS DR	SPECIFIC CROPS DROP-DOWN MENU SELECTIONS (SECTION IV)			
Alfalfa	Chicory	Leek	Peach	
Amaranth	Chile	Lemon	Pear	
Anise	Chinese Greens (A Choy)	Lettuce, Baby	Peas	
Apples	Chinese Greens (Bok Choy)	Lettuce, Baby (Fall/Winter)	Peas, Seed	
Apricots	Chinese Greens (Bok Choy,	Lettuce, Baby	Peas, Snap or Sugar	
Artichoke, Annual	Baby)	(Spring/Summer)	Peppers, Bell (Not Final Harvest)	
Artichoke, Perennial	Chinese Greens (Bun Choy)	Lettuce, Head	Peppers, Bell (Final Harvest; Multiple	
Artichoke, Seed	Chinese Greens (Gai Choy)	Lettuce, Head (Fall/Winter)	Harvest Variety)	
Arugula	Chinese Greens (Gai Lan)	Lettuce, Head	Peppers, Bell (Final Harvest; Single	
Arugula, Baby	Chinese Greens (On Choy)	(Spring/Summer)	Harvest Variety)	
Arugula, Wild	Chinese Greens (Shanghai Bok	Lettuce, Iceberg	Peppers, Chili	
Asparagus	Choy)	Lettuce, Iceberg (Fall/Winter)	Pimiento	
Avocado	Chinese Greens (Snow Pea	Lettuce, Iceberg	Pineapple	
Beans	Tips)	(Spring/Summer)	Pineapple Artichoke, Perennial	
Beans, Dry	Chinese Greens (Tong Ho)	Lettuce, Leaf	Pistachio	
Beans, Lima	Chinese Greens (Yam Leaves)	Lettuce, Leaf (Fall/Winter)	Pistachio Artichoke, Seed	
Beans, Seed	Chinese Greens (Yu Choy)	Lettuce, Leaf	Potato	
Beet	Chives	(Spring/Summer)	Pumpkin	
Blackberry	Cilantro	Lettuce, Romaine	Radicchio	
Blueberry	Cilantro, Bunch	Lettuce, Romaine	Radish	
Bok Choy	Collard Greens	(Fall/Winter)	Rapini	
Bok Choy, Baby	Corn	Lettuce, Romaine	Raspberry	
Borage	Corn, Sweet	(Spring/Summer)	Rosemary	
Boysenberry	Cover Crop, Legume (Irrigated)	Lettuce, Romaine Hearts	Ryegrass, Winter	
Broccolette	Cover Crop, Legume (Non-	Lettuce, Romaine Hearts	Safflower	
Broccoli	Irrigated)	(Fall/Winter)	Seed Crops	
Broccoli (Fall/Winter)	Cover Crop, Non-Legume	Lettuce, Romaine Hearts	Shallots	
Broccoli (Spring/Summer)	(Irrigated)	(Spring/Summer)	Sorrel	
Broccoli, Seed	Cover Crop, Non-Legume (Non-	Lemon/Lime	Spinach	
Broccoli Rabe	Irrigated)	Mache	Spinach, Baby	
Broccolini	Cress	Malabar	Spinach, Baby (multiple cuttings)	

SPECIFIC CROPS DR	C CROPS DROP-DOWN MENU SELECTIONS (SECTION IV)			
Brussels Sprouts Cabbage Cabbage, Chinese Cabbage, Green Cabbage, Napa Cabbage, Red Cabbage, Savoy Cantaloupe Carrots, Baby Carrots, Full-Sized Cauliflower Cauliflower (Spring/Summer) Cauliflower, Seed Celery Chard, Green Chard, Red Chard, Swiss Cherimoya Cherry	Cucumber Dandelion Greens Daikon Dill Eggplant Endive Escarole Fennel Flowers Frisee Garlic Gladiolus Grapefruit Grapes, Table Grapes, Wine Greenhouse Flowers Greenhouse Perennials Greenhouse Shrubs Hay Jalapeno Kale Kale (multiple cuttings) Kale, Baby	Mango Marjoram Melon Mint Mixed Greens Mixed Greens, Baby Mizuna Mustard Mustard, Baby Nectarine Nursery Perennials Nursery Shrubs Nursery Trees Oat Hay Olive Onions Onions, Dry Onions, Green Orach Orange Orchids Oregano Oriental Lily	Spinach, Bunch Spinach, Bunch (multiple cuttings) Spinach, Clip Spinach, Clip (multiple cuttings) Spring Mix Spring Mix (multiple cuttings) Spring Mix, Baby Spring Mix, Baby (multiple cuttings) Sprouts Squash, Summer Squash, Winter Squash, Zucchini Strawberry (Not Final Harvest) Strawberry, Up to 12-months variety (Final Harvest) Strawberry, Greater than 12-months variety (Final Harvest) Strawberry, 2nd year (Final Harvest) Strawberry, 2-step program, 1st step (Final Harvest) Strawberry, 2-step program, 2nd step (Final Harvest) Thyme Tomatillo	
			,	

SAMPLE TNA REPORT

AGRICULTURAL REGULAT	ORY PROGRAM - TOTAL NITRO	BEN APPLIED	REPORT FOR	M Report	ting Year: 2019 V	Reportin	g Period: 1/1/2019 to 12/31
SECTION I: GENERAL RAN	NCH INFORMATION						
Name of Operation:	Test Operation (AW999	9)					
	Ranch 2 (Global ID: AGL		41)				
		A 100 00 00 00 00 00 00 00 00 00 00 00 00	00 P				
Physical Rench Acres	Reporting:	(Ffelo	Pallow As verdre regoring pa				el Crop Acres (from Section IV)
APN(S) - WARK THE APNS T	THAT CORRESPOND TO ACREAGE RE	PORTED IN TH	IS FORM - CHE	SALL			
if ranch is a greenhouse, nur	zery, or hydrogonic, zelect from the d	rapdawn:					
SECTION II: NITROGEN AF	PPLIED WITH IRRIGATION WATER	R		[include	all ecuroes and application	naja gi laas	hing, runoff, backfluck, operational spi
Section II-A: Water Source	e(s):						
Select the option that inclu- water is used for imigation	udes <u>ell sources of irrigation wate</u> T	r used during	the reporting	period. Select	t the <u>first</u> aption in th	e dropdoi	vm manu unlass recycled / recli
Section II-B: Recycled / Re	eclalmed Water						
	al Volume of Recycled / Recialme	d Water Ann	lied to Entire i	Reporting Acre	s During Reporting	Period (ne	illons):
	Yourse of Necyphon Necoming						
	(0) 100000000000000000000000000000000000				(from agency data)	:	
	ND3-N (mg/L):		Tota	Nitrogen (mg	Nr)c		
Section II-C: Well / City W			AN I	10 17			rogen (NO3-N or M)
	Itrate Concentration in Well / City cleans in lighted syrage concentration P	The second secon			as Nitrate (NOS) sect Siver valued, as		
	d Total <u>Volume of Well / City Wa</u>		and the second s	The second second second	The state of the s		
Section II-D: Nitropen App	mor indicate returns of spanoposit ranad purp Miles	DATES NAME AND	Secure consent	in sounded output	e-monte to particul, use the	Skipel 3001 00	*Physical rench agree minus fallo
account to the organization	Y230 22	14503016	SECTION SECTION	Andrea III			
	Nitrogen Ap	pilled with <u>irri</u>	oation Water	lbs/ranch-ac*	۲		
Section II-E: Volume Chec	*						
- Massa Manusara Mari University	This field auto-calculat estimated average acre					laN	
SECTION III: NITROGEN A	PPLIED WITH COMPOST & AME	NDMENTS					
Physical A	Acres Receiving Compost & Amer	idments:		Nb	rogen Applied in Cor	mpost & A	mendments (total lbs):
							- 10 Oct 10 C
Applications of nitrogen from sor	regost and amendments (not fertilizers) mad the nitrogen may be distributed econ	a so Improve soil	properties, enditor	es a source of nitro	igen to ILLL grage gravin du	ring the repo	rding gerlad may be reported here. Alterna
			Marie Control			married and	1000 August 1000 A
SECTION IV: NITHOBEN A	APPLIED WITH FERTILIZERS & OT	HER MATER	IALS AND NII	Nitrogan	ENT IN THE SUIL		a the N. Port. Partitions Escal Tool for ass
			225.000	Applied in Fertilizers and			
2002204040040400000		Total Cros	Mitrogen Present in Soil	Other Meterials	Certified Organic /		999900000000000000000000000000000000000
1.	nd Herrected During Reporting Period	Acres	(fee/grog-eq)	(lba/orug-ad)	Conventionally Snow	V	Jiddklonal Information
2	V	- 3		- 8		v	
3.	v					v	
4.	V		0			v	
5.	~			9	0	V	
SECTION V- BASIS FOR TI	HE AMOUNT OF TOTAL NITROGE	N THAT WA	S APPLIED (se	lart all that ar	nnivi	Y.CX	
122 257 255	1723 1724	700			3.57		H. C
Commodity or Industry 6		0515	Pertilizer Clatric		Grower Experienc		Laboratory Recommendation
☐ Local Info/Neighbor ☐ Trade Publication	☐ On Form Research Trial ☐ UC Form Advisor Consu		Private Research		☐ Scientific Literatus ☐ University Research		Site Analysis Dry Blomass Tield Projection
	, , , , , , , , , , , , , , , , , , , ,	10000		MIT.	- Serence Q Products		III TORNA Progressor
BECTION VI: EXPLANATION							
	form does not represent the entire g of this form may also be include		sporting period	, please provid	te a brief explanation	n. Addition	ial comments or explanations t
SECTION VII: CERTIFICAT	TON - This form must be reviewe	d and certific	ed by the Oper	etor/Responsi	be Party listed on th	e eNOI	
on my inquiry of those ind	perjury that I have personally examinately examinately responsible ties for submitting false informat	for obtaining	the information	on, I believe the	at the information is		
			Save & Su	and the same of th			